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=> d que stat 114
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L7
               OR ?NEOPLASM? OR ?TUMOR? OR ?TUMOUR?)
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L8
                SE?)
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          1007 SEA FILE=HCAPLUS ABB=ON L9 AND ((?HUMAN? OR ?SYNGENEIC?)(W)(?D
L10
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              6 SEA FILE=HCAPLUS ABB=ON L11 AND (?CANINE? OR DOG?)
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             14 SEA FILE=HCAPLUS ABB=ON L8 OR L12
L13
              6 SEA FILE=HCAPLUS ABB=ON L13 AND (?CANINE? OR DOG?)
L14
=> d ibib abs 114 1-6
L14 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
                         2003:273846 HCAPLUS
ACCESSION NUMBER:
                         139:358123
DOCUMENT NUMBER:
                         Long-Term Survival of Dogs with Advanced
                         Malignant Melanoma after DNA
                         Vaccination with Xenogeneic Human
                         Tyrosinase: A Phase I Trial
                         Bergman, Philip J.; McKnight, Joanne; Novosad, Andrew;
AUTHOR(S):
                         Charney, Sarah; Farrelly, John; Craft, Diane; Wulderk,
                         Michelle; Jeffers, Yusuf; Sadelain, Michel; Hohenhaus,
                         Ann E.; Segal, Neil; Gregor, Polly; Engelhorn, Manuel;
                         Riviere, Isabelle; Houghton, Alan N.; Wolchok, Jedd D.
                         Donaldson-Atwood Cancer Clinic and Flaherty
CORPORATE SOURCE:
                         Comparative Oncology Laboratory, The E&M Bobst
                         Hospital of the Animal Medical Center, New York, NY,
                         10021, USA
                         Clinical Cancer Research (2003), 9(4), 1284-1290
SOURCE:
                         CODEN: CCREF4; ISSN: 1078-0432
                         American Association for Cancer Research
PUBLISHER:
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     Canine malignant melanoma (CMM) is a spontaneous,
AB
     aggressive, and metastatic neoplasm. Preclin. mouse studies
     have shown that xenogeneic DNA vaccination with genes
     encoding tyrosinase family members can induce antibody and
     cytotoxic T-cell responses, resulting in tumor rejection.
     studies provided the rationale for a trial of xenogeneic
     DNA vaccination in CMM using the human
     tyrosinase gene. Three cohorts of three dogs each with
     advanced (WHO stage II, III, or IV) CMM received four biweekly i.m.
     injections (dose levels 100, 500, or 1500 µg, resp./vaccination) of
     human tyrosinase plasmid DNA i.m. via the
     Biojector2000 delivery device. Mild local reactions at injection sites
     were the only toxicities observed, with no signs of autoimmunity. One
     dog with stage IV disease had a complete clin. response in
     multiple lung metastases for 329 days. Two dogs with stage IV
     disease had long-term survivals (421 and 588+ days) in the face of
     significant bulky metastatic disease, and two other dogs with
     locally controlled stage II/III disease had long-term survivals (501 and
     496 days) with no evidence of melanoma on necropsy. Four other
     dogs were euthanized because of progression of the primary
     tumor. The Kaplan-Meier median survival time for all nine
     dogs was 389 days. The results of this trial demonstrate that
```

xenogeneic DNA vaccination of dogs with

advanced malignant melanoma is a safe and potentially therapeutic modality. On the basis of these results, addnl. evaluation of this novel therapeutic is warranted in locally controlled CMM and advanced human melanoma.

REFERENCE COUNT:

THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:794136 HCAPLUS

DOCUMENT NUMBER:

137:309482

TITLE:

Compositions for treatment of melanoma and

method of using same

INVENTOR (S):

Houghton, Alan N.; Bergman, Philip J.; Wolchok, Jedd

D.

PATENT ASSIGNEE(S):

USA

3

SOURCE:

U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S.

Ser. No. 627,694.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002150589 WO 9825574 WO 9825574	A1 A2 A3	20021017 19980618 19980903	US 2001-996128 WO 1997-US22669	20011127 19971210
W: CA, JP, US RW: AT, BE, CH, US 6328969 PRIORITY APPLN. INFO.:	DE, DK B1	, ES, FI, 20011211	FR, GB, GR, IE, IT, US 1999-308697 US 1996-32535P US 1997-36419P WO 1997-US22669 US 1999-308697 US 2000-180651P	LU, MC, NL, PT, SE 19990521 P 19961210 P 19970217 W 19971210 A2 19990521 P 20000126 A2 20000728

Melanoma can be treated in a mammalian subject by administering to the subject an immunol.-effective amount of a xenogeneic melanoma -associated differentiation antigen. For example, genetic immunization with a plasmid containing a sequence encoding human gp75 has been shown to be effective in treatment of dogs with melanoma.

L14 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:747832 HCAPLUS

DOCUMENT NUMBER:

135:313607

TITLE:

Fusogenic protein genes regulated by tissue-specific

excision and their use in cancer therapy

INVENTOR(S):

Vile, Richard G.; Harrington, Kevin; Murphy, Stephen;

Bateman, Andrew

PATENT ASSIGNEE(S):

Mayo Foundation for Medical Education and Research,

DOM Total

SOURCE:

PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

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                                                   WO 2001-US10250
                                                                               20010330
                           A2
                                     20011011
     WO 2001074861
                            A3
     WO 2001074861
                                     20020314
     WO 2001074861
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                             C2
                                     20021227
                             A1 20021017 US 2001-822634
                                                                               20010330
     US 2002150556
                                                                           P 20000331
                                                    US 2000-193977P
PRIORITY APPLN. INFO.:
     A method of ensuring tumor specific expression of a cytotoxic
      gene is described. Th preferred gene encodes a viral fusogenic peptide
      that stimulates syncytium formation. The gene is under control of a
      tumor-specific promoter and is flanked by a pair of sites
      recognized by a site-specific recombinase. The recombinase gene is under
      control of a promoter that functions in normal tissue, but not in the
      tumor cell. In normal tissues, the fusogenic protein gene is
      excised by site-specific recombination and lost. In tumor
      cells, the gene is not lost by excision and is expressed. After cell
      fusion and syncytium formation, the tumor cells die.
L14 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
                            2001:101291 HCAPLUS
ACCESSION NUMBER:
                             134:161880
DOCUMENT NUMBER:
                             cDNAs encoding the Flt-3 receptor ligand and there use
TITLE:
                             as adjuvants in vector vaccines
                             Hermanson, Gary George
INVENTOR(S):
                             Vical Inc., USA
PATENT ASSIGNEE(S):
                             PCT Int. Appl., 148 pp.
SOURCE:
                             CODEN: PIXXD2
                             Patent
DOCUMENT TYPE:
                             English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                             DATE
                             KIND DATE
                                                 APPLICATION NO.
      PATENT NO.
                                                   _____
                                     _____
                             ----
                                     20010208 WO 2000-US20679
                                                                               20000731
      WO 2001009303
                              A2
                             A3
                                     20010816
      WO 2001009303
          W: CA, JP, US
          RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
               PT, SE
                                                    US 1999-146170P
                                                                           P 19990730
PRIORITY APPLN. INFO.:
     A method of increasing the strength of the immune response of vector
      vaccines using an expression vector for the Flt3 ligand is described.
      vaccines are made of independent non-integrating expression vectors: one
      encodes the antigen or a cytokine and the other encodes the Flt3 ligand.
      The present invention also provides a method broadly directed to improving
      immune response of a vertebrate in need of immunotherapy by administering
      in vivo, into a tissue of a vertebrate, a Flt-3 ligand-encoding
      polynucleotide and one or more antigen- or cytokine-encoding
      polynucleotides. The polynucleotides are incorporated into the cells of
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effective amount of a Flt-3 ligand and one or more antigens is produced in

the vertebrate in vivo, and a prophylactically or therapeutically

vivo.

L14 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:351545 HCAPLUS

DOCUMENT NUMBER:

133:16301

TITLE:

INVENTOR(S):

Immunotherapy with 5T4 antigen Carroll, Miles William; Myers, Kevin Alan Oxford Biomedica (UK) Limited, UK

PATENT ASSIGNEE(S):

PCT Int. Appl., 79 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PAT	CENT :	NO.			KIN		DATE			APPL	ICAT	ION 1	. 00		D	ATE	
	2000				A2 A3	-	2000			WO 1	999-0	GB38!			1	991	118
WO	2000	0294.	∠ O >> T	7. M		71.77			סם	RC.	BR,	BV	$C\Delta$	CH	CN	CB	CII
	W:	AE,	AL,	DV	DM	AU,	EC,	ET,	CB,	מס,	GE,	GH,	GM	HR.	HII.	TD.	IL,
					, אוט	vc,	KD,	KD	UD,	T.C	LK,	T.D	T.S	T.T	T.IT	LW,	MΔ
		IN,	•	JP,			MY	MC,	NZ,	DI.	PT,	DV,	וזם,	SD,	SE.	SG,	
		•	MG,	-				MO,	IV∠,	PL,	US,	117	TO,	VII	7N	7M	-
		SK,		TJ,	TM,	TR,	-			UG,	05,	04,	V 14 ,	10,	ΔA,	2W,	Ди,
		AZ,	BY,	KG,			RU,		TM	ma	TTC	σw	א תרי	ישם	CH	αv	חבי
	RW:				LS,	MW,	SD,	SL,	5Z,	12,	UG,	∠w,	AI,	DE,	CH,	DI,	OE,
			ES,								MC,			SE,	Br,	ы,	CF,
			CI,	CM,		GN,					SN,				1.	2001	110
EΡ	1036				_A1		2000				.999			NTT		9991	
	R:	AT, IE,		CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	ъ1,	ъО,	NL,	SE,	MC,	Ρ1,
GB	2347	932			A1		2000	0920		GB 2	000-	1498	6		1:	9991	118
	2347				В2		2003	0507									
ΕP	1152	060			A1		2001	1107		EP 2	001-	2014	47		1:	9991	118
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		IE,	FI														
EΡ	1160				<b>A</b> 1		2001	1205		EP 2	001-	2014	48		1	9991	118
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		ΙE,	FΙ														
GB	2370	571			A1		2002	0703		GB 2	001-	2766	9		1	9991	118
GB	2370	571			B2		2003	0507									
GB	2370	572			A1		2002	0703		GB 2	001-	2767	3		1:	9991	118
GB	2370	572			В2		2003	0507									
GB	2370	573			A1		2002	0703		GB 2	001-	2767	5		1:	9991	118
GB	2371	803			A1		2002	0807		GB 2	002-	1276	3		1:	9991	118
JΡ	2002	5300	60		T2		2002	0917		JP 2	000-	5824	15		1:	9991	118
GB	2378	704			A1		2003	0219		GB 2	002-	2453	8		1	9991	118
GB	2378	704			В2		2003	0507									
AU	7669	54			В2		2003	1030		AU 2	-000	1394	9		1:	9991	118
WO	2001	0364	86		A2		2001	0525		WO 2	000-	GB43	17		2	0001	113
WO	2001	0364	86		A3		2002	0510									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	ВA,	ВB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CU,								FI,						
		HU,		IL,	IN,						KR,						
		•	LV,	MA.							MZ,						
		SD,					SL,				TT,						
		YU,									RU,				_	-	
	RW:	GH,					MZ,				TZ,			AT,	BE,	CH,	CY,
	2	DE,			FT.	FR	GB.	GR.			LU,						-
											MR,					,	•
EP	1242		O. ,	00,	A2						000-			1		0001	113

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                20030507
                                           JP 2001-538975
                                                                   20001113
                         T2
     JP 2003515323
                                                                   20021230
    US 2004131591
                                20040708
                                           US 2002-334235
                         A1
                                                               A 19981118
PRIORITY APPLN. INFO.:
                                           GB 1998-25303
                                                               A 19990127
                                            GB 1999-1739
                                                               A 19990730
                                           GB 1999-17995
                                                               A 19970604
                                           GB 1997-11579
                                                               A 19970620
                                           GB 1997-13150
                                                               A 19970704
                                           GB 1997-14230
                                                               A3 19991118
                                           EP 1999-972219
                                           GB 2000-14986
                                                               A3 19991118
                                           GB 2001-27669
                                                                A 19991118
                                           WO 1999-GB3859
                                                                  19991118
                                                               W
                                                               A 20000215
                                           GB 2000-3527
                                                                Α
                                           GB 2000-5071
                                                                  20000302
                                            US 2000-445375
                                                               A2 20000321
                                            WO 2000-GB4317
                                                                W 20001113
                                           US 2002-60585
                                                                A2 20020129
```

The authors disclose the use of recombinant poxvirus vectors in vaccinating against 5T4-expressing tumors. In addition, the authors disclose the sequence characterization of 5T4 antigen from dog. In one example, mice vaccinated with human 5T4 antigen, using a vaccinia virus vector, exhibited protection against challenge with the syngeneic colon tumor cell line CT26 expressing human 5T4.

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L14 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN
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ACCESSION NUMBER:

1999:819393 HCAPLUS

DOCUMENT NUMBER:

132:45805

TITLE:

Monitoring gene expression or protein levels in evaluating an organism's response to drugs of abuse Miles, Michael F.; Lai, Chao-qiang; Lockhart, David J.

INVENTOR(S):
PATENT ASSIGNEE(S):

Regents of the University of California, USA

SOURCE:

PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

т• 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

TENT	INFORMATION:	

PATEN	IT NO.			KIN	)	DATE		i	APPL	ICAT:	ION I	мо.		D	ATE	
					-									-		
WO 99	67267			A1		1999										
W	V: AE,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
	DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,
	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
	TM,	TR,	TT,	UA,	UG,	US,	UΖ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,
	MD,	RU,	ТJ,	TM												
R	W: GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	ŪĠ,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,
	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NΕ,	SN,	TD,	TG					
AU 99	946963			A1		2000	0110		AU 1:	999-	4696	3		1	9990	522
PRIORITY A	APPLN.	INFO	. :					,	US 1:	998-	9026	ВP	J	2 1:	9980	522
								,	US 1:	999-	3370	22	1	1	9990	521
								,	WO 1:	999-1	US13	839	Ţ	<b>V</b> 1:	9990	522
											e		-1			

AB This invention pertains to the identification of genes whose expression levels are altered by chronic exposure of a cell, tissue, or organism to one or more drugs of abuse (e.g. alc., stimulants, opiates, etc.). In one

embodiment, this invention provides a method of monitoring the response of a cell to a drug of abuse. The method involves contacting the cell with the drug of abuse; providing a biol. sample comprising the cell; and detecting, in the sample, the expression of one or more genes or ESTs identified herein, where a difference between the expression of one or more of said genes of ESTs in said sample and one or more of said genes or ESTs in a biol. sample not contacted with said drug of abuse indicates a response of the cell to the drug of abuse. Genes and ESTs whose expression was altered by contact of a cell with EtOH were identified by exposing human neuroblastoma cell line SH-SY5Y-AH1861. Four genes showed a dose-dependent response to EtOH and are therefore believed to represent important targets of EtOH: dopamine  $\beta$  hydroxylase, sodium-dependent norepinephrine transporter, delta-like protein, and monocyte chemoattractant peptide 1. Similar studies were conducted by exposing mice to cocaine. Altered gene expression in the hippocampus, ventral tegmental area, prefrontal cortex, and nucleus accumbens were observed

REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d que stat 116
               1 SEA FILE=REGISTRY ABB=ON C31H38F2IN3O3/MF
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          694719 SEA FILE=HCAPLUS ABB=ON (?MELANOMA? OR ?CANCER? OR ?CARCIN?
L7
                 OR ?NEOPLASM? OR ?TUMOR? OR ?TUMOUR?)
               9 SEA FILE=HCAPLUS ABB=ON L7 AND ?XENOGENEIC?(L)(L1 OR ?TYROSINA
L8
                 SE?)
            2179 SEA FILE=HCAPLUS ABB=ON L7 AND (L1 OR ?TYROSINASE?)
1007 SEA FILE=HCAPLUS ABB=ON L9 AND ((?HUMAN? OR ?SYNGENEIC?)(W)(?D
L9
L10
                 IFF?(W)?ANTIGEN?) OR ?HUMAN?)
             261 SEA FILE=HCAPLUS ABB=ON L10 AND (DNA? OR ?TUMOUR?(W)?AGENT?)
L11
               6 SEA FILE=HCAPLUS ABB=ON L11 AND (?CANINE? OR DOG?)
L12
              14 SEA FILE=HCAPLUS ABB=ON L8 OR L12
L13
               6 SEA FILE=HCAPLUS ABB=ON L13 AND (?CANINE? OR DOG?)
L14
L15
               9 SEA L14
               6 DUP REMOV L15 (3 DUPLICATES REMOVED)
L16
=> d ibib abs 116 1-6
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L16 ANSWER 1 OF 6 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN ACCESSION NUMBER: 2003-354564 [33] WPIDS

DOC. NO. CPI:

C2003-093465

TITLE:

New compositions comprising immunostimulatory substances packaged into virus-like particles, useful as a vaccine for enhancing an immune response in animals, e.g. for

treating or preventing allergies, tumors or

viral infections.

DERWENT CLASS:

B04 D16

INVENTOR(S):

BACHMANN, M; CIELENS, I; LIPOWSKY, G; MAURER, P;

MEIJERINK, E; PUMPENS, P; RENHOFA, R; SCHWARZ, K; STORNI,

T; TISSOT, A; BACHMANN, M F

PATENT ASSIGNEE(S):

(CIEL-I) CIELENS I; (CYTO-N) CYTOS BIOTECHNOLOGY AG; (LIPO-I) LIPOWSKY G; (MAUR-I) MAURER P; (MEIJ-I) MEIJERINK E; (PUMP-I) PUMPENS P; (RENH-I) RENHOFA R;

(SCHW-I) SCHWARZ K; (TISS-I) TISSOT A

COUNTRY COUNT:

102

PATENT INFORMATION:

PAT	rent	NO			KI	1D I	TAC	€	V	VEE	K		LA	I	PG								
	2003		1401	·	7.2	200			(2)			יים	 I 1	222	-								
WO	200.														GB	GH	GM	GR	ΤE	IT	KE	LS	LU
	KW:								SE														
	₩.	AE						-										CO	CR	CU	CZ	DE	DK
	,,,																			KE			
																				OM			
		RO	RU	SD	SE	SG	SI	SK	SL	ТJ	TM	TN	TR	TT	TZ	UA	UG	US	UZ	VC	VN	YU	ZA
		ZM	ZW																				
US	200	3099	9668	3	<b>A1</b>	200	305	529	(20	003	37)												
ΑU	200	2339	9224	1			_		(20		-												
EP	145								(20														
	R:	AL								DK	EE	ES	FΙ	FR	GB	GR	ΙE	IT	LI	LT	LU	ΓΛ	MC
		MΚ	NL	PT	RO	se	sI	SK	TR														

#### APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003024481 US 2003099668	A2 A1 Provisional	WO 2002-IB4132 US 2001-318994P	20020916 20010914
	Provisional	US 2002-374145P	20020422

### Harris 09/996,128

			US	2002-244065	20020916
AU	2002339224	A1	AU	2002-339224	20020916
ΕP	1450856	A2	EP	2002-777600	20020916
			WO	2002-IB4132	20020916

#### FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002339224	Al Based on	WO 2003024481
EP 1450856	A2 Based on	WO 2003024481

PRIORITY APPLN. INFO: US 2002-374145P 20020422; US 2001-318994P 20010914; US 2002-244065 20020916

AN 2003-354564 [33] WPIDS

AB WO2003024481 A UPAB: 20030526

NOVELTY - A composition for enhancing immune response in animal comprising a virus-like particle, and an immunostimulatory substance, is new. The immunostimulatory substance is bound to the virus-particle particle.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) enhancing an immune response in an animal by introducing into the animal the new composition;
- (2) producing the composition for enhancing an immune response in an animal;
- (3) vaccines comprising the new composition together with a pharmaceutical diluent, carrier or excipient; and
  - (4) immunizing or treating an animal by:
  - (a) administering the vaccine to the animal;
- (b) priming a T cell response in the animal by administering the vaccine; or
- (c) boosting a T cell response in the animal by administering the vaccine.

ACTIVITY - Immunostimulant; Cytostatic; Antiallergic; Virucide; Antibacterial.

Mice were subcutaneously primed with 100 micro g p33-VLP alone, mixed with 20 nmol CpG-oligonucleotide (p33-VLP+CpG), or p33-VLP packaged with CpG-oligonucleotide after dialysis of free CpG-oligonucleotide (p33-VLP/CpG). Untreated naive mice served as negative control. Twenty days later, mice were challenged with lymphocytic choriomeningitis virus (LCMV) (200 plaque forming units (pfu)), intravenously). Results showed that LCMV titer (log10) was lowest for p33-VLP/CpG.

MECHANISM OF ACTION - Vaccine.

USE - The composition is useful as a vaccine for enhancing an immune response in an animal, particularly a mammal or human. Specifically, the composition is useful for enhancing a B cell response, a T cell response (particularly a Th or Th1 cell response), or a cytotoxic T-lymphocyte (CTL) response. (All claimed.) The composition or vaccine is also useful for immunizing or treating an animal (claimed), e.g. humans, sheep, horses, cattle, pigs, dogs, cats, rats, birds, reptiles or fish. The composition is particularly useful as prophylactic or therapeutic vaccines against allergies, tumors (e.g. breast cancers, neuroblastoma, or leukemia), viral diseases (e.g. influenza, hepatitis, measles or chicken pox), or bacterial infections (e.g. tuberculosis, pneumonia or syphilis).

L16 ANSWER 2 OF 6 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 2003174788 MEDLINE

TITLE:

Long-term survival of dogs with advanced

malignant melanoma after DNA vaccination with xenogeneic human

tyrosinase: a phase I trial.

AUTHOR:

Bergman Philip J; McKnight Joanne; Novosad Andrew; Charney Sarah; Farrelly John; Craft Diane; Wulderk Michelle; Jeffers Yusuf; Sadelain Michel; Hohenhaus Ann E; Segal Neil; Gregor Polly; Engelhorn Manuel; Riviere Isabelle;

Houghton Alan N; Wolchok Jedd D

CORPORATE SOURCE:

Donaldson-Atwood Cancer Clinic and Flaherty Comparative Oncology Laboratory, The E&M Bobst Hospital of the Animal

Medical Center, New York, New York 10021, USA..

Philip.bergman@amcny.org

CONTRACT NUMBER:

P01 CA33049 (NCI)

P01 CA59350 (NCI) R01 CA56821 (NCI)

Clinical cancer research : an official journal of the American Association for Cancer Research, (2003 Apr) 9 (4)

1284-90.

Journal code: 9502500. ISSN: 1078-0432.

PUB. COUNTRY: DOCUMENT TYPE: United States

(CLINICAL TRIAL)

(CLINICAL TRIAL, PHASE I)

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200401

English

ENTRY DATE:

Entered STN: 20030417

Last Updated on STN: 20040121 Entered Medline: 20040120

PURPOSE: Canine malignant melanoma (CMM) is a AΒ spontaneous, aggressive, and metastatic neoplasm. Preclinical

mouse studies have shown that xenogeneic DNA vaccination with genes encoding tyrosinase family members can

induce antibody and cytotoxic T-cell responses, resulting in tumor rejection. These studies provided the rationale for a trial of

xenogeneic DNA vaccination in CMM using the

human tyrosinase gene. EXPERIMENTAL DESIGN: Three

cohorts of three dogs each with advanced (WHO stage II, III, or

IV) CMM received four biweekly i.m. injections (dose levels 100, 500, or

1500 micro g, respectively/vaccination) of human

tyrosinase plasmid DNA i.m. via the Biojector2000

delivery device. RESULTS: Mild local reactions at injection sites were

the only toxicities observed, with no signs of autoimmunity. One

dog with stage IV disease had a complete clinical response in

multiple lung metastases for 329 days. Two dogs with stage IV

disease had long-term survivals (421 and 588+ days) in the face of significant bulky metastatic disease, and two other dogs with

locally controlled stage II/III disease had long-term survivals (501 and

496 days) with no evidence of melanoma on necropsy. Four other

dogs were euthanized because of progression of the primary tumor. The Kaplan-Meier median survival time for all nine

dogs was 389 days. CONCLUSIONS: The results of this trial

demonstrate that xenogeneic DNA vaccination of

dogs with advanced malignant melanoma is a safe and

potentially therapeutic modality. On the basis of these results,

additional evaluation of this novel therapeutic is warranted in locally

controlled CMM and advanced human melanoma.

L16 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2003:513728 BIOSIS PREV200300513108

TITLE:

Phase I trials of xenogeneic DNA vaccination with human tyrosinase or

murine gp75 in client-owned dogs with advanced

stage spontaneous malignant melanoma.

AUTHOR(S): Bergman, Philip J.

Bergman, Philip J. [Reprint Author]; McKnight, Joanne

[Reprint Author]; Houghton, Alan N.; Dowd, Michael [Reprint

Author]; Craft, Diane M.; Kang, Xiaoqiang; Riviere,

Isabelle; Hohenhaus, Ann E.; Hicklin, Daniel J.; Wolchok,

Jedd

CORPORATE SOURCE:

SOURCE:

The Animal Medical Center, New York, NY, USA

Proceedings of the American Association for Cancer Research

Annual Meeting, (July 2003) Vol. 44, pp. 758. print. Meeting Info.: 94th Annual Meeting of the American

Association for Cancer Research. Washington, DC, USA. July

11-14, 2003. ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE:

English

ENTRY DATE:

Entered STN: 5 Nov 2003

Last Updated on STN: 5 Nov 2003

L16 ANSWER 4 OF 6

MEDLINE on STN

DUPLICATE 2

ACCESSION NUMBER: DOCUMENT NUMBER:

2003232830 MEDLINE PubMed ID: 12755292

TITLE:

Development of a multiple-marker polymerase chain reaction

assay for detection of metastatic melanoma in

lymph node aspirates of dogs.

AUTHOR:

Catchpole Brian; Gould Sara M; Kellett-Gregory Lindsay M;

Dobson Jane M

CORPORATE SOURCE:

Department of Pathology and Infectious Diseases, Royal Veterinary College, University of London, London, UK.

SOURCE:

American journal of veterinary research, (2003 May) 64 (5)

544-9.

Journal code: 0375011. ISSN: 0002-9645.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200307

ENTRY DATE:

Entered STN: 20030521

Last Updated on STN: 20030708

Entered Medline: 20030707

AB OBJECTIVE: To develop a reverse transcriptase-polymerase chain reaction (RT-PCR) assay to detect canine melanoma-associated

antigens (MAAs) and to use this technique to screen aspirates of lymph

nodes (LNs) for evidence of metastatic spread of oral malignant melanoma. ANIMALS: 7 dogs with oral malignant

melanoma and 4 dogs with multicentric lymphosarcoma. PROCEDURES: We prepared cDNA from melanoma tumor

biopsies and fine-needle aspirates obtained from submandibular LNs of

dogs with oral malignant melanoma or multicentric

lymphosarcoma. The RT-PCR assay was performed by use of tyrosinase, Melan-A, gp100, tyrosinase-related protein 2

(TRP-2), or melanoma antigen-encoding gene B (MAGE-B)-specific primers. RESULTS: We detected MAGE-B mRNA in canine testicular

tissue but not in melanoma biopsy specimens. Tyrosinase

, Melan-A, gp100, and TRP-2 mRNAs were detected in tumor biopsy

specimens and in 2 of 5 LN aspirates from dogs with melanoma, suggesting metastatic spread in those 2 dogs. We did not detect MAAs in LN aspirates obtained from dogs with multicentric lymphosarcoma. Sequencing of canine Melan-A and gp100 PCR products confirmed the specificity of the assay for these genes. CONCLUSIONS AND CLINICAL RELEVANCE: Clinical staging of dogs with oral malignant melanoma is useful to assist in designing appropriate treatments. However, results of histologic examination of LN biopsy specimens can be inconclusive and, in humans, can underestimate the number of patients with metastatic disease. Molecular staging of melanomas in dogs can be achieved by screening LN aspirates for MAA mRNA, and this can be performed in combination with cytologic examination to aid in detection of metastatic disease.

L16 ANSWER 5 OF 6 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER:

2003-182484 [18] WPIDS

CROSS REFERENCE:

1998-348236 [30]

DOC. NO. CPI:

C2003-048030

TITLE:

Treating melanoma in a mammalian subject

comprises administering to the subject an immunological amount of a xenogeneic differentiation antigen of the same type as a differentiation antigen expressed by

melanoma cells of the subject.

DERWENT CLASS:

B04 D16

INVENTOR(S):

BERGMAN, P J; HOUGHTON, A N; WOLCHOK, J D

PATENT ASSIGNEE(S):

(BERG-I) BERGMAN P J; (HOUG-I) HOUGHTON A N; (WOLC-I)

WOLCHOK J D

COUNTRY COUNT:

1

PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA PG
US 2002150589	A1 20021017	7 (200318)*	15

## APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002150589	Al Provisional Provisional CIP of CIP of Provisional CIP of	US 1996-32535P US 1997-36419P WO 1997-US22669 US 1999-308697 US 2000-180651P US 2000-627694 US 2001-996128	19961210 19970218 19971210 19990521 20000126 20000728 20011127

# FILING DETAILS:

PATENT NO KIND	PATENT NO
US 2002150589 A1 CIP of	US 6328969
	20011127; US .9961210; US
1997-US22669 1	.9970218; WO .9971210; US
2000-180651P 2	.9990521; US 0000126; US .0000728

AN 2003-182484 [18] WPIDS

CR 1998-348236 [30]

US2002150589 A UPAB: 20030317 AB

NOVELTY - Treating melanoma (M1) in a mammalian subject comprising administering to the subject an immunological amount of a xenogeneic differentiation antigen (DA) of the same type as a (DA) expressed by melanoma cells of the subject, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for vectors comprising 6408 or 6485 base pairs (bp), fully defined in the

ACTIVITY - Cytostatic. C57BL/6 mice were immunized with syngeneic melanoma cells. Immunizations were tested by intraperitoneal, subcutaneous or intradermal route. Mice were then assessed for antibodies against gp75 by ELISA. No antibodies or CTL against gp75 were detected after immunization.

MECHANISM OF ACTION - Gene therapy.

USE - The methods and xenogeneic (DA) are useful for treating canine malignant melanoma in dog suffering from the disease by administering an immunological amount of the xenogeneic (DA) (claimed) and for other mammals. Dwg.0/4

L16 ANSWER 6 OF 6 MEDLINE on STN 2000065928 MEDLINE ACCESSION NUMBER: PubMed ID: 10598869

DOCUMENT NUMBER:

Tyrosinase gene expression in clear cell sarcoma TITLE:

indicates a melanocytic origin: insight from the first

reported canine case.

Cangul I T; van Garderen E; van der Poel H J; Weijer K; AUTHOR:

Misdorp W

Department of Pathology, Faculty of Veterinary Medicine, CORPORATE SOURCE:

Utrecht University, The Netherlands.

APMIS : acta pathologica, microbiologica, et immunologica SOURCE:

> Scandinavica, (1999 Nov) 107 (11) 982-8. Journal code: 8803400. ISSN: 0903-4641.

PUB. COUNTRY: Denmark

(CASE REPORTS) DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

English LANGUAGE:

Priority Journals FILE SEGMENT: GENBANK-AF129000 OTHER SOURCE:

ENTRY MONTH: 199912

Entered STN: 20000113 ENTRY DATE:

Last Updated on STN: 20000113 Entered Medline: 19991228

The aim of this study was to characterize a metastasizing soft tissue AB tumor in a dog, which clinically, grossly and histologically showed a close resemblance to human clear cell sarcoma, a soft tissue variant of malignant melanoma. Ultrastructurally, melanosomes were found, indicating a melanocytic origin of the tumor. Using reverse-transcription polymerase chain reaction, expression of the gene encoding tyrosinase was determined in tumor cells. With this first case of canine clear cell sarcoma, as well as the earlier report from our laboratory on amelanotic melanomas in the cat, we demonstrate that expression of the tyrosinase gene may occur in a broader range of less differentiated melanocytic tumors in different species, including man.

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	FILE 'REGISTRY' ENTERED AT 13:58:43 ON 09 OCT 2004 E TYROSINASE/CN
L6	1 SEA ABB=ON TYROSINASE/CN
	FILE 'HCAPLUS' ENTERED AT 13:58:55 ON 09 OCT 2004
L7	694719 SEA ABB=ON (?MELANOMA? OR ?CANCER? OR ?CARCIN? OR ?NEOPLASM?
	OR ?TUMOR? OR ?TUMOUR?)
L8	9 SEA ABB=ON L7 AND ?XENOGENEIC?(L)(L1 OR ?TYROSINASE?)
L9	
L10	1007 SEA ABB=ON L9 AND ((?HUMAN? OR ?SYNGENEIC?)(W)(?DIFF?(W)?ANTIG
	EN?) OR ?HUMAN?)
L11	261 SEA ABB=ON L10 AND (DNA? OR ?TUMOUR?(W)?AGENT?)
L12	6 SEA ABB=ON L11 AND (?CANINE? OR DOG?)
L13	14 SEA ABB=ON L8 OR L12
L14	14 SEA ABB=ON L8 OR L12 6 SEA ABB=ON L13 AND (?CANINE? OR DOG?) 6 Cells from CAPlus
	FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO' ENTERED AT
	14:02:11 ON 09 OCT 2004
L15	9 SEA ABB=ON L14
L16	6 DUP REMOV L15 (3 DUPLICATES REMOVED) ( OCF 7 COMPONENT CO
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